ACC.12
61st Annual Scientific Session & Expo
ACC-i2 with TCT innovation in intervention

E1496
JACC March 27, 2012
Volume 59, Issue 13

Chronic CAD/Stable Ischemic Heart Disease

SIMPLE PREDICTION OF LONG-TERM MORTALITY AMONG HYPERTENSIVE PATIENTS WITH CORONARY ARTERY DISEASE: NEW DATA FROM AN EXTENDED FOLLOW-UP OF THE INTERNATIONAL VERAPAMIL-SR/TRANDOLAPRIL STUDY (INVEST)

ACC Moderated Poster Contributions
McCormick Place South, Hall A
Monday, March 26, 2012, 11:00 a.m.-Noon

Session Title: Lipids, Hypertension, Hyperglycemia: New Tricks for Old Targets
Abstract Category: 2. Chronic CAD/Stable Ischemic Heart Disease: Clinical
Presentation Number: 1202-223

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Introduction: Accurate prediction of long-term mortality in contemporary hypertensive populations with CAD without a complex risk score remains difficult.

Hypothesis: Simple clinical variables can predict long-term mortality in CAD patients.

Methods: INVEST was an international study in hypertensive patients with stable CAD conducted from 1997 to 2003. It found that a beta blocker/diuretic strategy was equivalent to a calcium antagonist/ACE-inhibitor strategy for reducing blood pressure and preventing death, MI or stroke. To determine the effect on all-cause mortality, extended follow up was completed for the US cohort through ascertainment of the National Death Registry until 2008. Cox proportional hazards model compared those who died versus those who remained alive. The model included blood pressure at 6 months, at which time protocol directed titration of antihypertensive medications occurred. Diabetes, peripheral arterial disease, heart failure, stroke/TIA, and unstable angina/MI were also updated at 6 months.

Results: The total cohort was 22,576 patients (17,131 resided in the US, mean age 67±10 years). During a mean follow-up of 7.6 years, 23.6% of the US cohort died (n=4047). Advanced age, renal impairment, heart failure, and diabetes imparted the largest hazards for all-cause mortality (Figure).

Conclusions: In one of the largest contemporary cohorts of hypertensive elderly patients with CAD, simple clinical variables can predict long-term all-cause mortality.

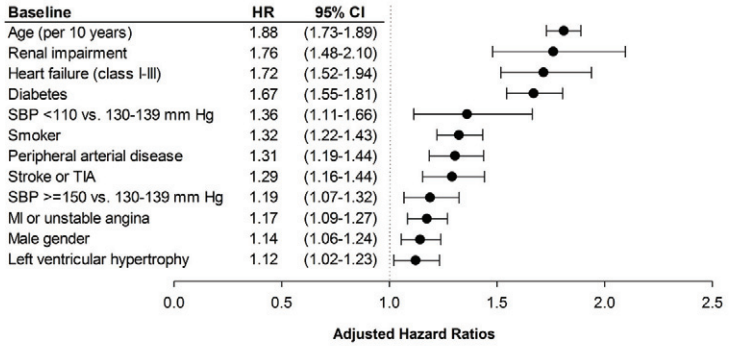

Figure. Predictors of all-cause mortality during extended follow-up (mean 7.6 years).
BMI=body mass index, CI=confidence interval, HR=hazard ratio, MI=myocardial infarction, SBP=systolic blood pressure, TIA = Transient ischemic attack